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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/526,770

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Alan Foster

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06/20/2007

WOODARD, EMHARDT, MORIARTY, MCNETT & HENRY LLP
111 MONUMENT CIRCLE, SUITE 3700
INDIANAPOLIS, IN 46204-5137

EXAMINER

SANDY, ROBERT JOHN

ART UNIT

PAPER NUMBER

3677

MAIL DATE

DELIVERY MODE

06/20/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/526,770	Applicant(s) FOSTER, ALAN	
	Examiner Robert J. Sandy	Art Unit 3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-22 and 25-32 is/are rejected.
- 7) ☒ Claim(s) 23 and 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 February 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05 June 2007 has been entered.

This is a non-final Office action responsive to the reply filed on 05 June 2007.

- Claims 6 and 33-35 have been canceled.
- Claims 1, 14, 21, and 22, were amended.
- Claims 1-5 and 7-32 are pending.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claimed subject matter pertaining to the features of “the magnetic means comprise at least one electro-magnet” (claim 17) and “means to selectively energize and de-energize the electro-magnet” (claim 18), must be shown or the feature(s) canceled from the claim(s). **No new matter should be entered.**

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

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application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The specification is objected to under 35 U.S.C. § 112, first paragraph, as failing to teach how to make and/or use the invention, i.e., failing to provide an enabling disclosure

The following is a quotation of 37 CFR 1.71(a)-(c):

- (a) The specification must include a written description of the invention or discovery and of the manner and process of making and using the same, and is required to be in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which the invention or discovery appertains, or with which it is most nearly connected, to make and use the same.
- (b) The specification must set forth the precise invention for which a patent is solicited, in such manner as to distinguish it from other inventions and from what is old. It must describe completely a specific embodiment of the process, machine, manufacture, composition of matter or improvement invented, and must explain the mode of operation or principle whenever applicable. The best mode contemplated by the inventor of carrying out his invention must be set forth.
- (c) In the case of an improvement, the specification must particularly point out the part or parts of the process, machine, manufacture, or composition of matter to which the improvement relates, and the description should be confined to the specific improvement and to such parts as necessarily cooperate with it or as may be necessary to a complete understanding or description of it.

The specification is objected to under 37 CFR 1.71 because it fails to provide an enabling disclosure teaching how to make the claimed invention, as to the following: The specification fails to provide an enabling disclosure teaching how to make the claimed support structure pertaining to the support structure including "at least one electro-magnet" and "means to selectively energize and de-energize the electro-magnet." (claims 17 and 18). The written specification and the drawings do not provide any description of structure describing a "means to selectively energize and de-energize the electro-magnet" necessary to provide an enabling disclosure.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 17 and 18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The non-enabled subject pertains to the support structure including “at least one electro-magnet” and “means to selectively energize and de-energize the electro-magnet” is critical or essential to the practice of the invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationship(s) pertain to the recitation of “the magnetic means comprise two pairs of separate magnetically co-operable components and one component of at least one pair of magnetically co-operable components is mounted with respect to each of said first and second members”, where the claim provide does not clarify what structure of the claimed support structure the “magnetic means” is mounted to.

Claims 25 and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 25, there is no antecedent basis for the recitation of “the pairs of magnetically co-operable components”. Claim 10 only specifies “at least one pair of magnetically co-operable components” while claim 25 is inconsistent in its claim terminology of

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“the pairs of magnetically co-operable components.”. Therefore, it is unclear whether there is “one pair” or “pairs” of the magnetically co-operable components required in the claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-11, 13, 15, 16, 20, 25, and 27-32 are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 4,887,824 to Vig. Et al. (U. S. Patent No. 4,054,965, cited by applicant). Vig. Et al. ('965) discloses a support structure for a castor comprising a first member (16), a second member (15) that is rotatable with respect to the first member about a pivot axis, and magnetic means (magnets 19, 20) that is operable up to a certain torque to restrain movement of the second member from one angular position with respect to the first member, wherein said magnetic means comprises a first magnet (20) associated with the first member (16) and a second magnet (19) associated with the second member (15), said first magnet being coaxially aligned with respect to said second magnet.(as shown in Fig. 4);

(concerning claim 2) said one angular position corresponds to a desired registration of the first and second members;

(concerning claim 3) other angular positions the magnetic means is operable to permit free rotation unless and until re-registration occurs;

(concerning claim 4) the magnetic means is operable to bias the second member into said one angular position when displaced therefrom;

(concerning claim 5) the first and second members have co-axial spaced apart mutually facing surfaces (as shown in Fig. 4);

(concerning claim 7) the magnetic means comprises a plurality of magnetically co-operable components (19, 20) at least one of which is associated with the first member and at least one of which is associated with the second member;

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(concerning claim 8) the magnetic means comprises at least one permanent magnet (“permanent”, col. 2, line 14);

(concerning claim 9) the magnetic means comprises at least one ferro-magnet (“ferrite”, col. 2, line 27);

(concerning claim 10) the magnetic means comprises at least one pair of magnetically co-operable components (19, 20);

(concerning claim 11) the at least one pair of magnetically co-operable components are the aforesaid first and second members, separate components or at least one separate component;

(concerning claim 13) a small air gap (“When the magnets are in position, one over the other, they are spaced from each other a substantial distance, which may be e.g. approximately 1/8.”, col. 2, lines 56-58) between the magnetically co-operable components creates a magnetic flux that provides said restraining effect;

(concerning claim 15) one of the first and second members has an annular skirt or rim (outer peripheral edge portion of 16) extending therefrom toward the other one of the members;

(concerning claim 16) the skirt encloses the magnetic means (Fig. 4);

(concerning claim 20) both components of said at least one pair are permanent magnets;

(concerning claim 25, so far as definite) the pair of magnetically co-operable components are disposed to have confronting faces that are slightly spaced apart to define an air gap (col. 2, lines 56-58) therebetween;

(concerning claim 27) A castor (11) suitable for a manually movable trolley (10) and comprising the claimed support structure:

(concerning claim 28 a wheel (11), roller or other ground engaging rolling element that is mounted rotatably with respect to a support bracket (support structure of vehicle 10 shown in fig. 1);

(concerning claim 29) the support bracket constitutes or forms part of the aforesaid second member;

(concerning claim 30) A trolley (vehicle 10) provided with at least the one castor;

(concerning claim 31) the trolley being when with four castors (11);

(concerning claim 32) the trolley when manually movable.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vic et al. ('965) in view of Kramcsak, Jr. (U. S. Patent No. 2,799,514, having been cited of record).

Concerning claim 14, Vic et al. ('965) discloses a support structure for a castor, comprising: first and second plates (16, 15) located in co-axial, spaced apart relationship so as to provide mutually facing surfaces, the one plate is rotatable with respect to the other plate, and one component (one of 19, 20) of at least one pair of co-operable components being mounted on each plate, at least one of which pair of components (19, 20) is a permanent magnet adapted, in one angular position of the rotary plate with respect to the non-rotary plate, to be brought into registration with a relatively small air gap (col. 2, lines 56-58) between adjacent surfaces of the two co-operable components to create a magnetic flux that, up to a certain torque restrains rotation, and in other angular positions without registration permits free rotation unless and until re-registration occurs, wherein said components of said at least one pair of co-operable components mounted on each plate are co-axially aligned with respect to one another.

However, Vic et al. ('965) does not explicitly shown a bearing means located between the plates. In view of Kramcsak, Jr. ('514), it is well known by one of ordinary skill in the art, that bearing means (i.e., "bearings shown between bearing races 26 and 27) have been provided to castor assemblies for the purpose of have a rotatable castor at assist in a user to steer a push cart as shown in Figs 1-3.

Claims 19, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vic et al. ('965).

Concerning claim 19, Vic et al. ('965) discloses the claimed invention except for one component of said at least one pair is a permanent magnet and the other component of the pair is a ferro-magnetic element. However, it would have been obvious to one having ordinary skill in

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the art at the time of applicant's invention was made to substitute or form the magnets of Vic et al. ('965) to be in form of electro-magnets or ferro-magnets, since the magnetic material claimed and cited in the prior art operate as equivalents for their intended use and function in the magnetic castor art and the selection of any of these known equivalents to modified into the castor assembly of Vic et al. ('965) would be within the level of ordinary skill in the art. Further, applicant has not stated or disclosed that the selection of the above magnetic attractive material solves any relevant problem or achieves an unexpected result or is for a particular purpose, thus the castor assembly of Vic et al. ('965) operates equally as well.

Concerning claims 21 and 22, Vic et al. ('965) discloses the claimed invention except for wherein a disc is used for said first magnet or said second magnet; and in which either the first magnet or the second magnet is arcuate. It would have an obvious matter of design choice to have had the magnets of Vic et al. ('965) to be in the form of a disc, or is arcuate, since applicant hasn't provided any criticality of form of magnets to solve any stated problem or produce an unexpected result. Furthermore, one of ordinary skill in the art would recognize the form of the magnets by Vic et al. ('965) to perform equally well for their intended purpose.

Allowable Subject Matter

Claims 23 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 26 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments with respect to the rejected claims indicated in the prior Office action have been considered but are moot in view of the new ground(s) of rejection.

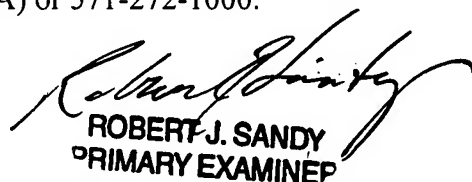
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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert J. Sandy whose telephone number is 571-272-7073. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J.J. Swann can be reached on 571-272-7075. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



ROBERT J. SANDY
PRIMARY EXAMINER

Robert J. Sandy
Primary Examiner
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